



**UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

mf

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

09/143,279 08/28/98 GILL

T
EXAMINER

GLENN L WEBB
P O BOX 951
CONIFER CO 80433

LM31/0426

ART UNIT, A	PAPER NUMBER
-------------	--------------

2721
DATE MAILED:

04/26/00

4

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/143,279

Applicant(s)

GILL ET AL.

Examiner

Amir Alavi

Art Unit

2721

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

Status

- 1) ☒ Responsive to communication(s) filed on 28 August 1998.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some * c) ☐ None of the CERTIFIED copies of the priority documents have been:
1. ☐ received.
2. ☐ received in Application No. (Series Code / Serial Number) _____.
3. ☐ received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. & 119(e).

Attachment(s)

- 14) ☒ Notice of References Cited (PTO-892)
- 15) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 16) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 17) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 18) ☐ Notice of Informal Patent Application (PTO-152)
- 19) ☐ Other: _____.

Art Unit: 2721

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 1-18 are rejected under 35 U.S.C. 102(e) as being anticipated by Dermer (U.S.patent 5,668,931).

Regarding claim 1, Dermer teaches A system for digitally defining a color from more than one color model, said system comprising:

Art Unit: 2721

means for selecting at least one color component from a first color model; (see lines 44-67, column 18; lines 1-45, column 19); means for selecting at least one additional color component from at least one other color model (see lines 44-67, column 18 and lines 1-45, column 19) and means for assigning percentages to each of said selected color components. (see lines 27-45, column 19).

Regarding claim 2, Dermer teaches A system for determining a coordinate set for visual depiction of a process color having at least one other color applied to it, said system comprising:

Means for defining the process color and the at least one other color applied to it into process color components, spot color components and percentage values (see lines 44-67, column 18 & lines 1-45, column 19); means for converting said process color components and their percentage values into a coordinate set values for visual depiction (see lines 1-59, column 8); means for determining said coordinate set values of said spot color components (see lines 1-33, column 8); means for applying percentages to said coordinate set of values of said spot color components according to said percentage values for said spot color components (see lines 27-45, column 19); means for determining a value for said percentages of said spot color components layered onto said coordinate set of values converted from said process color components (see lines 44-67, column 18); and means for converting said value into said coordinate set. (See lines 1-59, column 8).

Art Unit: 2721

Regarding claim 3, Dermer teaches The system of claim 2 wherein said means for converting said process color components into said coordinate set values includes: means for setting said coordinate set values for said process color components to said coordinate set values for the color white if there are no process color components. (See FIGS.23 & 24).

Regarding claim 4, Dermer teaches the system of claim 2 wherein said means for determining a value further includes:

Means for determining said value by an iterative process for each of the spot Colors sequentially layered on the previously determined said value until said value Is finally determined. (See lines 45-67, column 9 & lines 1-30, column 10).

Regarding claim 5, Dermer teaches The system of claim 2 wherein said means for assigning said percentages of said spot color components according to said shade value includes: means for applying percentages to each of the components of the coordinate set values according to said percentage value for those components. (See lines 1-45, column 19).

Regarding claim 6, Dermer teaches the system of claim 5 wherein said means for determining a value includes:

Means for determining a value for each of the coordinate set components for Each of said percentage values for each of said coordinates set components layered Onto each of the components of said coordinate set values converted from said Process color components. (See lines 45-67, column 9 & lines 1-29, column 10).

Art Unit: 2721

Regarding claim 7, Dermer teaches A system for visually depicting a document having at least one spot color applied onto a document process color on a computer monitor screen, said system comprising:

Means for defining the document process color (see FIGS.23 & 24); means for defining each of at least one spot color to be applied onto the document process color (see FIGS.23 & 24); means for applying shade values to each of said document process color and to each of said at least one spot color (see FIGS. 23 & 24); means for defining a new color based on the shade values applied for each of said document process color and for each of said at least one spot color (see FIGS.23 & 24); and means for applying said defined new color to a document depicted visually on a computer monitor screen. (See FIGS. 23 & 24).

Regarding claim 8, Dermer teaches the system of claim 7 wherein said system further includes:

Said means for defining the document process color includes: (see lines 1-59, column 8); means for defining the process color components of the document process color; (see lines 1-59, column 8); and said means for applying shade values to each of said document process color and to each of said at least one spot color includes (see lines 1-59, column 8); means for applying a shade value to each of the process color components of the document process color. (See lines 1-59, column 8).

Regarding claim 9, Dermer teaches the system of claim 7 wherein said system further includes:

Art Unit: 2721

Said means for defining each of at least one spot color to be applied onto the document process color includes: (see lines 1-59, column 8); means for defining the spot color model components of each of the at least one spot color to be applied onto the document process color (see lines 1-59, column 8); and said means for applying shade values to each of said document process color and to each of said at least one spot color further includes (see lines 1-59, column 8): means for applying a shade value to each of the components of each of the at least one spot color to be applied onto the document process color. (See lines 1-59, column 8).

Regarding claim 10, Dermer teaches the system of claim 7 wherein said system further includes:

Said means for defining the document process color includes: (see lines 1-59, column 8); means for defining the process color components of the document process color; (see lines 1-59, column 8); said means for defining each of at least one spot color to be applied onto the document process color includes (see lines 1-59, column 8): means for defining the spot color model components of each of the at least one spot color to be applied onto the document process color (see lines 1-59, column 8); and said means for applying shade values to each of said document process color and to each of said at least one spot color further includes (see lines 1-59, column 8): means for applying a shade value to each of the process color components of the document process color and to each of the spot color components of each of the at least one spot color to be applied onto the document process color. (See lines 1-59, column 8).

Art Unit: 2721

Regarding claim 11, Dermer teaches the system of claim 7 wherein said means for defining a new color includes:

Means for layering on each of said at least one spot color onto said document

Process color sequentially in an iterative process. (See lines 45-67, column 9 & lines 1-30, column 10).

Regarding claim 12, Dermer teaches The system of claim 7 wherein said means for applying said defined new color to a document depicted visually on a computer monitor screen includes:

Means for converting the defined new color obtained from said means for defining a new color into a spot color model for display onto a computer monitor screen. (See FIGS. 23 & 24).

Regarding claim 13, Dermer teaches A process for digitally depicting a document having a combination of process colors and spot colors on a computer monitor screen, said process comprising the steps of: (see FIGS. 23 & 24)

Defining the process colors and the spot colors (see FIGS. 23 & 24); assigning shade values to each of said process colors and to each of said spot colors (see FIGS. 23 & 24); defining a color based on the combination of said assigned shade values for each of said process colors and for each of said spot colors (see FIGS. 23 & 24); and applying said defined color to the document visually depicted on the computer monitor screen. (See FIGS. 23 & 24)

Art Unit: 2721

Regarding claim 14, Dermer teaches A process for digitally depicting a document the process of claim 13 wherein said step of defining process colors and the spot colors further includes:

Converting said process color into an RGB value. (See lines 1-45, column 19).

Regarding claim 15, Dermer teaches the process of claim 13 wherein said step of defining the process colors and the spot colors further includes:

Determining the RGB value for the spot color. (See lines 1-45, column 19).

Regarding claim 16, Dermer teaches The process of claim 13 wherein said step of defining a color based on the combination of said assigned shade values for each of said process colors and for each of said spot colors further includes:

Determining a value for said defined color based on each of said spot colors

Shaded by said assigned shade value layered onto each of said process colors. (See FIGS. 23 & 24).

Regarding claim 17, Dermer teaches the process of claim 13 wherein said step of defining the process colors and the spot colors includes:

defining the process colors by the components of the process color model (see FIGS. 23 & 24); and defining the spot colors by the components of the spot color model. (See FIGS. 23 & 24).

Regarding claim 18, Dermer teaches the process of claim 17 wherein said step of defining a color includes:

Assigning shade values to each of said components of the process colors; and

Art Unit: 2721

Assigning shade values to each of said components of the spot colors. (See FIGS. 23 & 24).

Other prior art cited

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Dermer (U. S. patent 5,668,931) is pertinent as teaching color printing.

Dermer (U. S. patent 5,613,046) is pertinent as teaching method and apparatus for correcting for plate misregistration in color printing.

Dermer et al. (U. S. patent 5,313,570) is pertinent as teaching color printing.

McGreggor et al. (U. S. patent 5,963,201) is pertinent as teaching color Processing system.

Caruthers, Jr. et al. (U. S. patent 5,899,605)) is pertinent as teaching color mixing and color system for use in a printing machine.

Caruthers, Jr. et al. (U. S. patent 6,002,893) is pertinent as teaching high and low pigment loading for custom colors.

Caruthers, Jr. et al. (U. S. patent 5,897,239) is pertinent as teaching photometric

Art Unit: 2721

Color correction.

Goodman et al. (U. S. patent 5,713,062) is pertinent as teaching color mixing for Printing machine.

Silverbrook (U. S. patent 5,892,524) is pertinent as teaching apparatus for Printing multiple drop sizes and fabrication thereof.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to *Amir Alavi* whose telephone number is (703) 306-5913. The examiner can normally be reached on Monday through Friday from 8:00 a.m. to 5:30 p.m. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Boudreau, can be reached at (703)306-5406.

Any response to this action should be mailed to:

Assistant Commissioner for Patents
Washington, D.C. 20231

or faxed to:

(703) 308-9051, or (703) 308-9052 (for **formal** communications; please mark

Art Unit: 2721

"EXPEDITED PROCEDURE")

Or:

(703) 306-5406 (for **informal** or **draft** communications, please label
"PROPOSED" or "DRAFT")

Hand delivered responses should be brought to Crystal Park II, 2121 Crystal
Drive, Arlington, VA., Sixth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application should be
directed to the Group Receptionist whose telephone number is (703)305-3900.

Amir Alavi
Patent Examiner
Group Art Unit 2721
April 19, 2000

Dr. D. Tach

Dr. D. Tach
Patent Examiner
Group Art Unit 2721
April 19, 2000

R